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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,552	03/29/2004	Efraim Atad	27616	8284
67801 7590 01/22/2009 MARTIN D. MOYNIHAN d/b/a PRTSI, INC. P.O. BOX 16446 ARLINGTON, VA 22215				
EXAMINER TAYLOR, JOSHUA D				
ART UNIT 2426		PAPER NUMBER		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/810,552

**Applicant(s)**

ATAD ET AL.

**Examiner**

JOSHUA TAYLOR

**Art Unit**

2426

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments filed 10/30/2008 have been fully considered but they are not persuasive. On page 5, concerning the rejection of claim 15 under 35 U.S.C § 112, first paragraph, Examiner contends that having WiMax support integrated into a cable set-top box, as Applicant states on page 27, does not teach sending said WiMax over a cable. The set-top box could be configured to receive WiMax signals wirelessly. Furthermore, merely saying something can be done does not provide significant clarification as to how Applicant intends to do it. For the following rejection, Examiner is assuming that Applicant is referring to using some sort of encapsulation technique for transmitting the wireless protocol over a cable, which Reisman discusses in paragraph [0088].

On page 6, Applicant states that "The present invention ...relates to infrastructure for supporting *broadcast* and return channels," with the implication that Reisman does not disclose broadcasting. However, Examiner contends that Reisman does disclose broadcasting, as any wide area network must broadcast signals. None of the claim language declares a more specific type of broadcast, other than in claim 1, which alludes to a broadcast by stating "transmission between a plurality of user nodes and a central source node," but Reisman discloses having multiple users and source nodes for supplying information (paragraphs [0029] and [0032]).

Beginning on page 6, line 14, Applicant argues that Perlman does not "plug the hole" left by Reisman because Perlman does not disclose combining a WAN with a satellite broadcast connection. Applicant goes on to say that Perlman does not use a WAN, and that Reisman does not integrate the WAN infrastructure with the broadcast infrastructure. However, Examiner

reminds Applicant that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). More specifically, Examiner never suggested that Perlman used a WAN or that Reisman integrated the WAN infrastructure with the broadcast infrastructure. What Examiner stated was that Perlman taught integrating a wireless transceiver into a satellite antenna assembly, and that therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the rooftop location of the wireless transmitter as disclosed by Perlman with the system of Reisman, as stated in the following rejection.

Regarding Applicant's arguments on pages 8 and 9 concerning claim 14 and its dependencies, these arguments are moot, as Examiner is using the original Reisman rejection in view of Applicant's earlier arguments concerning the 35 U.S.C § 112 rejection.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting

ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/810,577.

Although the conflicting claims are not identical, they are not patentably distinct from each other because both disclose rooftop broadcast receiver installations using a terrestrial wide area network in combination with a terrestrial bi-directional antenna.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 15 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant describes using a wireless transmission standard over a wired part of the network, namely the cable part, but gives no explanation of the method or technique with which Applicant accomplishes this procedure.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4-9 and 12-15 rejected under 35 U.S.C. 103(a) as being unpatentable over Reisman (Pub. No.: US 2004/0031058) in view of Perlman (Pub. No.: US 2004/0110463).

Regarding claim 1, Reisman discloses **a wide area network for bi-directional transmission between a plurality of user nodes and a central source node, at least some of the user nodes comprising rooftop video broadcast receiving installations modified by combining with a terrestrial bi-directional antenna and wide-area network (WAN) transmission support electronics associated with said terrestrial bi-directional antenna therefrom** (Fig. 1, paragraph [0150]). Reisman discloses that WAN could be used to substitute for a local connection between any device sets to be coordinated. Furthermore, the support electronics are associated with the antenna in that they are both a part of the overarching system. Reisman does not disclose wherein the broadcast receiving installations are modified **to form a combined broadcast receiving and WAN node rooftop installation, said rooftop installations comprising a coaxial cable connection for reaching respective infrastructure**. However, Perlman discloses integrating a wireless transceiver into a satellite antenna assembly (Figs. 2 and 3, paragraph [0021], lines 2-10), in order to provide video services and two-way data

services. Furthermore, Perlman discloses that the satellite assembly can also be connected to a satellite receiver via a coaxial cable (Fig. 3, element 20, Fig. 6, paragraph [0043]). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the rooftop location of the wireless transmitter as disclosed by Perlman with the system of Reisman. This would have produced a highly desirable result, in that the data transmitted to the satellite dish could be received by a customer without the need for a direct wire connection to the satellite dish, which would be useful in conditions such as multi-unit dwellings.

Regarding claim 4 and 5, Reisman discloses **the wide area network of claim 1, wherein said rooftop video broadcast receiving installations can be satellite receiving installations or terrestrial broadcast receiving installations** (Reisman, paragraph [0090], lines 1-10).

Regarding claim 6, Reisman discloses **a wide area network system, comprising: a central source node, a plurality of base nodes connected via cable infrastructure to said central node, and a plurality of user nodes, at least some of the user nodes comprising rooftop video broadcast receiving installations modified by combining with a terrestrial bi-directional antenna and wide area network (WAN) transmission support electronics** (paragraphs [0090], [0150]). Reisman discloses that WAN could be used to substitute for a local connection between any device sets to be coordinated. Reisman does not disclose wherein the broadcast receiving installations are modified **to form a combined broadcast receiving and WAN node rooftop installation, said installation comprising a coaxial cable connection for reaching respective internal infrastructure**. However, Perlman discloses integrating a wireless transceiver into a satellite antenna assembly (Figs. 2 and 3, paragraph [0021], lines 2-10), in order to provide video services and two-way data services. Furthermore, Perlman discloses that

the satellite assembly can also be connected to a satellite receiver via a coaxial cable (Fig. 3, element 20, Fig. 6, paragraph [0043]). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the rooftop location of the wireless transmitter as disclosed by Perlman with the system of Reisman. This would have produced a highly desirable result, in that the data transmitted to the satellite dish could be received by a customer without the need for a direct wire connection to the satellite dish, which would be useful in conditions such as multi-unit dwellings.

Regarding claim 7: **The wide area network system of claim 6, wherein the cable infrastructure is hybrid fiber coax (HFC) infrastructure** (Reisman, paragraph [0085], line 6).

Regarding claim 8: **The wide area network system of claim 6, wherein a wide area network transmission standard is used over said cable infrastructure** (Reisman, paragraph [0087]).

Regarding claim 9: **The wide area network system of claim 8; where said transmission standard is at least one of IEEE 802.16 standard or the IEEE 802.20 standard** (Reisman, paragraph [0085], lines 19-20).

Regarding claims 12 and 13, Reisman discloses **the wide area network system of claim 6, wherein said rooftop video broadcast receiving installations can be satellite receiving installations or terrestrial broadcast receiving installations** (Reisman, paragraph [0090], lines 1-10).

Regarding claim 14, Reisman discloses **a hybrid cable and wireless bidirectional transmission network comprising a wireless network part and a cable part wherein a wide**

**area network transmission standard is used over both said wireless network part and said cable part** (paragraphs [0085]-[0088]). Reisman discloses using encapsulation as a way to communicate over diverse networks.

Regarding claim 15: **The hybrid cable and wireless bidirectional transmission network of claim 14, wherein said transmission standard is at least one of IEEE 802.16 standard or the IEEE 802.20 standard** (Reisman, paragraph [0085], lines 19-20).

Claims 2-3, 10-11 and 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Reisman (Pub. No.: US 2004/0031058) in view of Perlman (Pub. No.: US 2004/0110463) as applied to the above rejections of claims 1, 6 and 14, respectively, and further in view of Kalavade et al. (Pat. No.: US 7,239,632).

Regarding claim 2, the combined teachings of Reisman and Perlman disclose **the wide area network of claim 1**. However, they do not disclose **wherein at least some of said user nodes comprise support for hotspot functionality, thereby to allow mobile communication devices to access said wide area network system**. Kalavade does (column 4, lines 26-52). Therefore, it would have been obvious to one with ordinary skill in the art to modify the teachings of Reisman and Perlman to include hotspot, as taught by Kalavade, for the benefit of user knowing the areas of hotspot where user LAN and WAN would be active.

Regarding claim 3: **The wide area network of claim 2, wherein said support for hotspot functionality substantially comprises standard IEEE 802.11** (Kalavade, column 4, lines 46-47). This claim is rejected on the same grounds as claim 2.

Claims 10 and 11 are rejected on the same grounds as claims 2 and 3, respectively.

Regarding claim 16, the combined teachings of Reisman and Perlman disclose **the hybrid cable and wireless bidirectional transmission network of claim 14**. However, they do not disclose **comprising a base station located between said cable part and said wireless part to interface there between**. However, Kalavade does (column 5, lines 26-5248-55). Kalavade discloses that base stations are used to act as interfaces between different parts of a communication network. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include base stations in the bidirectional transmission network taught by Reisman and Perlman. This would have produced a desirable result, in that it would allow the network to be expanded over a wider range, while still functioning efficiently.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSHUA TAYLOR whose telephone number is (571)270-3755. The examiner can normally be reached on 8am-5pm, M-F, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Josh Taylor/  
Examiner, Art Unit 2426

/Annan Q Shang/  
Primary Examiner, Art Unit 2424